

200208149-1

10/655,053

REMARKS

This is a full and timely response to the non-final Official Action mailed July 22, 2005. Reconsideration of the application in light of the above amendments and the following remarks is respectfully requested.

Claim Status:

By the forgoing amendment, the specification and various claims have been amended. Claims 14, 15, 17-22, 31, 32, 34-39, 53, 54 and 67 were withdrawn from consideration under a previous Restriction Requirement. Additionally, new claims 69-73 have been added, and original claims 28 and 29 have been cancelled. Thus, claims 1-13, 16, 23-27, 30, 33, 40-52, 55-66 and 68-73 are currently pending for further action.

Allowable Subject Matter:

In the recent Office Action, the Examiner indicates the presence of allowable subject matter in claims 4, 5, 10, 12, 29, 30, 45, 46 and 50-52. Applicant wishes to thank the Examiner for this indication of allowable subject matter.

Accordingly, claim 10 has been amended herein and rewritten as an independent claim. Thus, based on the Examiner's identification of allowable subject matter in claim 10, claim 10 should be in condition for allowance following entry of this amendment.

The recitations of claim 29 have been added to independent claim 27, from which claim 29 formerly directly depended. Thus, based on the Examiner's identification of allowable subject matter in claim 29, claim 27 and its dependent claims should be in condition for allowance following entry of this amendment.

200208149-1

10/655,053

Claim Objections:

The Office Action objects to “informalities” in claims 8, 14, 15 and 23. Applicant will here respond to each.

Claim 8 has been amended to correct the incorrectly stated dependency of the claim. Claim 8 now depends from claim 1. Thus, the objection to claim 8 should be reconsidered and withdrawn.

Claims 14 and 15 were objected to on the grounds that they should have been withdrawn from consideration, as were claims 31 and 32. (Action of 7/22/05, p. 2). Accordingly, claims 14 and 15 are now labeled “withdrawn” herein.

Claim 23 was objected to as being dependent on a withdrawn claim. As requested in the Office Action, the dependency of claim 23 has been amended herein. Thus, claims 23 should not be subject to further objection, and notice to that effect is respectfully requested.

Prior Art—Anticipation:

Claims 1-3, 6-9, 16, 23-26, 44, 47, 48, 55, 56 and 62-65 were rejected as anticipated under 35 U.S.C. § 102(b) by U.S. Patent No. 5,153,612 to Dunn et al. (“Dunn”). This rejection is respectfully traversed for at least the following reasons.

Claim 1 recites:

An ink delivery regulation apparatus, comprising:
an ink chamber configured to contain a quantity of ink;
a support configured to be coupled to said ink chamber; and
a resilient deflection member coupled to said support, said resilient deflection member extending into said ink chamber and occupying a volume thereof, said resilient deflection member being configured to resiliently deflect between a generally concave shape and a generally convex shape in response to a change in a negative pressure in said ink exterior to said resilient deflection member.
(emphasis added).

200208149-1

10/655,053

In contrast, Dunn does not teach or suggest a resilient deflection member that extends into an ink chamber, occupying a volume thereof, and "deflect[s] between a generally concave shape and a generally convex shape in response to a change in a negative pressure in said ink *exterior to said resilient deflection member.*" (emphasis added).

In contrast, Dunn teaches a flexible bladder (24) that contains a quantity of ink within the bladder and that deflects as ink is withdrawn from the bladder. (Dunn, abstract, Fig. 2). Thus, Dunn does not teach an ink chamber that contains ink and has a resilient deflection member extending into the chamber and into the ink contained therein and which deflects in response to changes in a negative pressure in the "ink *exterior to said resilient deflection member.*" (emphasis added).

"A claim is anticipated [under 35 U.S.C. § 102] only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). See M.P.E.P. § 2131. For at least this reason, the rejection of claim 1 and its dependent claims should be reconsidered and withdrawn.

Independent claim 9 similarly recites:

An ink delivery apparatus, comprising:
an ink chamber; and
a pressure regulation member having a support configured to be coupled to said ink chamber and a *resilient deflection member extending from said support and into said ink chamber occupying a volume thereof*, said resilient deflection member being configured to resiliently deflect between a generally concave shape and a generally convex shape *in response to a change in a negative pressure in said ink chamber exterior to said resilient deflection member.*
(emphasis added).

Independent claim 44 recites:

A printing device, comprising:
an ink chamber configured to contain a quantity of ink; and
a pressure regulation member having

200208149-1

10/655,053

a support coupled to said ink chamber;
a resilient deflection member extending from said support into said ink chamber and occupying a volume thereof, said resilient deflection member being configured to resiliently deflect between a generally concave shape and a generally convex shape *in response to a change in a negative pressure in said ink chamber exterior to said resilient deflection member*;
a fitment coupled to said ink chamber;
a bubble generator in communication with said ink chamber;
a print head coupled to said ink chamber.
(emphasis added).

Independent claim 55 recites:

A method of delivering ink, comprising:
providing an ink chamber containing an ink and wherein is disposed *a deflection member extending into said ink chamber and occupying a volume thereof*,
establishing a negative pressure in said chamber *exterior to said deflection member*;
supplying said ink to print head;
regulating a level of said negative pressure within a pre-determined range during said supplying of said ink by *resiliently deflecting said deflection member in response changes in said negative pressure*.
(emphasis added).

Independent claim 65 recites:

An ink delivery system, comprising:
containing means for containing a supply of ink for a print head;
means for establishing a negative pressure in said containing means; and
means for maintaining said negative pressure within a predetermined range, *said means for maintaining said negative pressure extending into and occupying a volume of said means for containing a supply of ink and flexing in response to changes in said negative pressure within said means for containing and exterior to said means for maintaining said negative pressure*.
(emphasis added).

As demonstrated above, Dunn does not teach or suggest the claimed apparatus and methods that include deflection members extending into an ink supply and resilient deflecting in response to changes in negative pressure within that ink supply, exterior to the deflection member. Again, "[a] claim is anticipated [under 35 U.S.C. § 102] only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 U.S.P.Q.2d 1051,

200208149-1

10/655,053

1053 (Fed. Cir. 1987) (emphasis added). See M.P.E.P. § 2131. For at least this reason, the rejection of claims 9, 44, 55 and 65, and their respective dependent claims, based on Dunn should be reconsidered and withdrawn.

Prior Art—Obviousness:

Claims 11, 13, 49 and 57-61 were rejected as being unpatentable under 35 U.S.C. § 103(a) over the combined teachings of Dunn and U.S. Patent No. 5,745,137 to Scheffelin et al. ("Scheffelin"). Claims 27, 28, 33 and 40-43 were rejected as being unpatentable under 35 U.S.C. § 103(a) over the combined teachings of Scheffelin in view of Dunn. These rejections are respectfully traversed for at least the same reasons given above with respect to the claims rejected as anticipated by Dunn.

The rejection of claim 27 is specifically traversed on the grounds that the claim 27 has been amended herein to include the allowable subject matter of claim 29. Therefore, following entry of this amendment, claim 27 and its dependent claims should be held allowable over the prior art of record as determined by the Examiner.

200208149-1

10/655,053

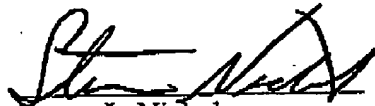
Conclusion:

The newly added claims are thought to be patentable over the prior art of record for at least the same reasons given above with respect to the original independent claims. Therefore, examination and allowance of the newly added claims is respectfully requested.

For the foregoing reasons, the present application is thought to be clearly in condition for allowance. Accordingly, favorable reconsideration of the application in light of these remarks is courteously solicited. If the Examiner has any comments or suggestions which could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the number listed below.

Respectfully submitted,

DATE: 20 October 2005


Steven L. Nichols
Registration No. 40,326

Steven L. Nichols, Esq.
Managing Partner, Utah Office
Rader Fishman & Grauer PLLC
River Park Corporate Center One
10653 S. River Front Parkway, Suite 150
South Jordan, Utah 84095

(801) 572-8066
(801) 572-7666 (fax)

CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence is being transmitted to the Patent and Trademark Office facsimile number 571-273-8300 on October 20, 2005. Number of Pages: 25


Rebecca R. Schow